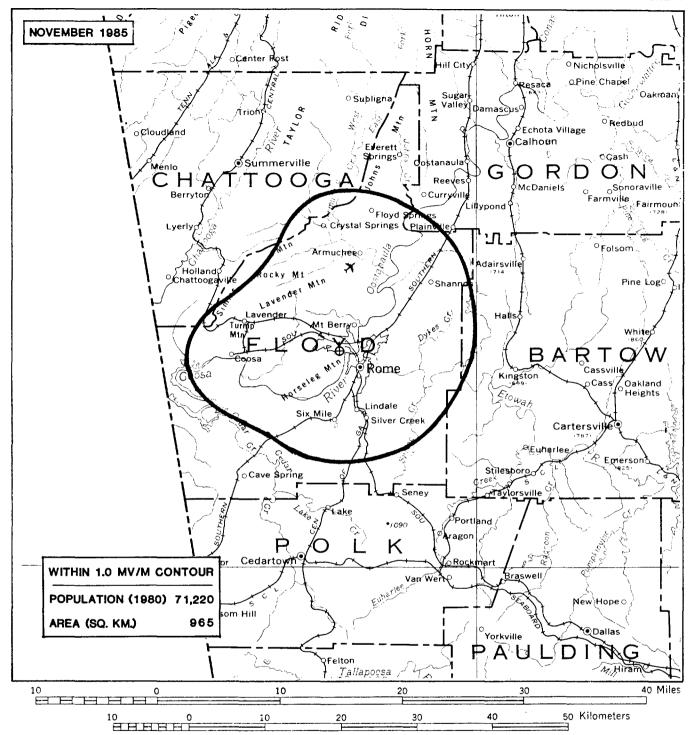


## PROPOSED ANTENNA AND SUPPORTING STRUCTURE

**SHORTER COLLEGE** ROME, GEORGIA

CH 217C2 4.4 KW 40 M



## PREDICTED 1 MV/M COVERAGE CONTOUR

SHORTER COLLEGE ROME, GEORGIA

CH 217C2 4.4 KW 40 M

duTreil - Rackley C

Consulting Engineers

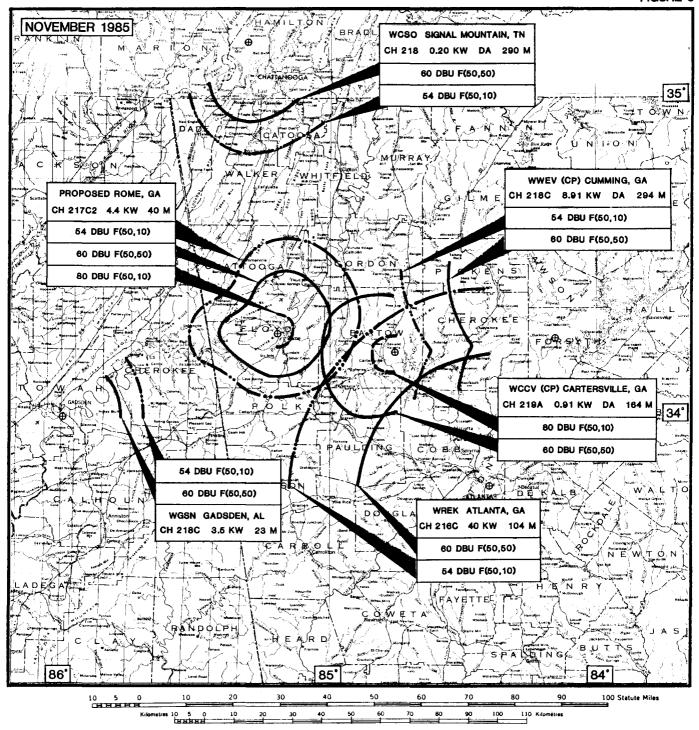
# ENGINEERING EXHIBIT APPLICATION FOR FM CONSTRUCTION PERMIT SHORTER COLLEGE ROME, GEORGIA

CH 217C2 4.4 KW 40 M

## Tabulation of Average Elevations and Distances to Coverage Contours

	Antenna Height Above	Dist	ance to Contou	r
Radial Bearing (deg T.)	Average Terrain	80 dBu F(50,50) (kilometers)	60 dBu F(50,50) (kilometers)	54 dBu F(50,10) (kilometers)
0	63.3	6.6	21.1	32.0
45	60.5	6.4	20.8	31.5
90	44.5	5.6	17.7	27.0
135	33.8	4.8	15.6	23.2
180	23.7*	4.7	14.6	22.0
225	29.6*	4.7	14.6	22.0
270	56.2	6.3	20.0	30.4
315	12.3*	4.7	14.6	22.0
Average	40.5 (Rounded to	40)		

<sup>\*</sup>Height of 30 meters assumed for values less than 30 meters.



### **ALLOCATION STUDY**

SHORTER COLLEGE ROME GEORGIA CH 217C2 4.4 KW 40 M

ENGINEERING EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
SHORTER COLLEGE
ROME, GEORGIA
CH 217C2 4.4 KW 40 M

#### Certification

Louis R. du Treil certifies that he is a partner in the firm of du Treil-Rackley, Consulting Engineers, with offices in Washington, D. C.; that he is a graduate electrical engineer and is registered as a professional engineer in the District of Columbia (No. 7048) and the State of Louisiana (No. 7977); that his qualifications as an expert in radio and television engineering are known to the Federal Communications Commission; that the foregoing exhibit was prepared by him or under his direction on behalf of Shorter College, Rome, Georgia; and that the technical information is true and correct to the best of his knowledge and belief.

No. 7048

No. 7048

No. 7048

No. 7048

Louis R. du Treil, P. E.

November 20, 1985

#### FM Broadcast Engineering Data



Na	ame of Applicant	Shorter	Colle	ege							
	Purpose of author amendment of Construct a ne	f applio		n with eng		stateme		of Nov	/ember :	20, 198	5.
	Change:	☐ Effective	e radiated	power			□ Fre	quency			
		☐ Antenna	ı height al	oove average terra	iin		Corr		ation of sit s only.		
		☐ Studio I	ocation ou	utside community	of license				, , , , , , , , , , , , , , , , , , ,		
		Other (S	Summarize	e briefly the natur	e of the chang	es proposed.)					
2.	Community of lice	nse:		State Georgia			City or Rome				
3.	Facilities requested	d:		Frequency	Channel	No.	С	lass (Check	one below)		
				91.3 ——— M	Hz217	_	_ A _ C	□ B □ C1	□ B1 ☑ C2	□ <sub>D</sub>	
4.	Geographic coordi	inates of anter	nna (to ne	arest second)							
	North Latitude	<b>o</b> 34	15	25 "	West t	.ongitude	<b>o</b> 85	11	45		
5.	Effective radiated	power:									
	Polarization			Horizontal Pla	<u>ne</u>			ım (Beam til	t only)		
	Horizontal			4.4	kW			N/A	kW		
	Vertical		<del></del>	4.4	kW		<u>N</u>	N/A	kW		
6.	Height in meters o	f antenna radi	ation cent	ter:							
				Above Average terrain (I	HAAT)	Above Mean Sea Le	<u>veľ</u>	Above Ground			
	Horizontal			40	meters	265.2	meters	30.5	_ meters		
	Vertical			40	meters	265.2	meters	30.5	_ meters		
7.	Is a directional ante	enna being pr	oposed?						□ YES Ø	NO NO	

If Yes, attach as Exhibit No.  $\frac{N/A}{}$  an engineering statement with all data specified in Section 73.316(d) of the Commission's Rules.

#### FM Broadcast Engineering Data

8.	Transmitter location:	State Georgia	County Floyd	
		City or Town	Street Address (or other identification)	
		Rome	Water tower at Shorter Col	lege _
9.	Overall height of complete structure above grouppurtenances and lighting (if any, see Part 17)		31.1 meters	
10.	Eng. Attach as Exhibit No map(s) (Sectional Ae	aronautical charts or equivalent)	) of the area proposed to be served and shown therec	on:
	(a) Proposed transmitter location and the radi	als along which the profile grag	phs have been prepared;	
	(b) The 1mV/m predicted contour;			
	(c) Area (sq. mi.) and population (latest censu	us) within 1 mV/m contour;		
	(d) Scale of miles or kilometers (kilometers if	available).		
11.	Attach as Exhibit No. $\frac{N/P_a}{P_a}$ map (Sectional Aero contours.	onautical charts where obtainab	ole) showing the present and proposed 1 mV/m (60 db	ou)
	Enter the following from Exhibit above: $N/A$	Gain Area	•	
	Percent change (gain area plus loss area as per If 50% or more this constitutes a major change.			
2.	If the main studio will not be within the boundar pursuant to Section 73.1125(f) of the Commission		to be served, attach as Exhibit No $\frac{N}{N}$ a justification	on
3.	Eng . Attach as Exhibit No map(s) (7.5 minute U location showing the following information:	l.S. Geographic Survey topogra	ophic quadrangles if available) of the proposed anten	na
	(a) Proposed transmitter location accurately plkilometers.	otted with the latitude, the longit	tude lines clearly marked and showing a scale of statu	te
	(b) Transmitter location and call letters of all A	AM broadcast stations within 2	miles of the proposed antenna location.	
4.	or established commercial and government rece	eiving stations in the general vic deffect, a description of remedial	adcast radio stations (except amateur and citizens band cinity which may be adversely affected by the propos I steps that may be pursued if necessary, and a stateme tionable effect on existing stations.	ed

F

15. Tabulation of Terrain Data. (Calculated in accordance with the procedure prescribed in Section 73.313 of the Commission's Rules utilizing 7.5 minute topographic maps, if available.)

Radial bearing	Height of antenna,	Predicted Distance
(degrees true)	radiation center above average elevation of radial	To the 1 mV/m contour
	(3-16 kilometers)	
	Meters	Kilometers
0°	63.3	21.1
45°	60.5	20.7
90°	44.5	17.7
135°	33.8	15.6
180°	23.7	14.6
225°	29.6	14.6
270°	56.2	20.0
315°	12.3	14.6

#### **Allocation Studies**

(See Subpart C of Part 73 of the Commission's Rules and Regulations)

16. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico?

☐ Yes KD No

If Yes, attach as Exhibit  $No^{N/A}$  a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

- 17. With regard to stations within 320 kilometers (199 miles) of the common border between the United States and Mexico, attach as Exhibit No. 1/A information required in 1/2.
- 18. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), then with regard to stations more than 320 kilometers (199 miles) from the common border between the United States and Mexico on it has proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as Exhibit No. a complete allocation study to establish the lack of prohibited overlap of contours involving these stations. The allocation study should include the following:
  - (a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
  - (b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
  - (c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
  - (d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
  - (e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
  - (f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
  - (g) A scale of miles and properly labeled longitude and latitude lines, shown across the entire (Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
  - (h) The name of the map(s) used in the exhibit(s).
- A showing that the proposed operation meets the minimum distance separation requirements. If any separations are proposed that are less than the applicable minimum separation requirements plus 15 kilometers, include these stations. Also include existing stations, proposed stations, and cities which appear in the Table of Assignments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

19.	If Yes, attach as Exhibit No.		common border between the United States and all provisions of the Working Agreement for Allord States FM Agreement of 1947.	□ voe	☑ No M Broad-
20.		ed by 53 or 54 channels (10.6 or 10. ntermediate frequency [i.f.] interfe	8 MHz) attach as Exhibit No. $\frac{\mathrm{N/A}}{}$ information rerence).	equired in <u>1</u> /	'(separa-
21.	Is the proposed operation or	Channel 218, 219 or 220?		☐ Yes	₩ No
	If Yes, attach as Exhibit No. 1221, 222, and 223.	/A information required in 1/ reg	arding separation requirements with respect to s	tations on (	Channels
22.			201 to 221 (88.1-91.9 MHz) and the proposed ant ciently near the Grade B contour that a question	on of interfe	
	If Yes, attach as Exhibit No. include discussion of the powhich may occur.	g • a map showing the Grade B cossibility of interference to the Cha	ntour of the television station and the proposed ar annel 6 station and the steps proposed to reme	ntenna locat edy any inte	ion. Also rference
23.	Is the proposed station for a	channel in the range from Channel	el 221 to 300 (92.1-107.9 MHz)?	☐ Yes	⊠ No
	If Yes, attach as Exhibit No.	$\frac{A}{A}$ information required in $\underline{1}/(B)$	Except for class D [secondary] proposals.)		
24.	If the proposed antenna loc proposed to remedy any inte		a, attach Exhibit No. Eng •a discussion of blanl	keting and t	the steps
25.	Environmental Statement, Se	e Part I, Subpart 1 of the Commis	sion's Rules.		
	Would a Commission grant of Commission's Rules?	f this application be a major actio	n as defined by Section 1.1305 of the	□ Yes	⊠ No
	If Yes, attach as Exhibit No.	a narrative statement in acco	ordance with Section 1.1311 of the Commission	's Rules.	
	If No, explain briefly. Over	all height of ante than 300 feet.	nna and support structure	is	
	- · · · · · · · · · · · · · · · · · · ·	true to the best of my knowledge	ted below and that I have examined the foregoing and belief.  uis R. du Treil, P. E.	statement c	of techni-
	December 10, 1	<del></del>	Name		
	Date	The second secon	puis la du Mel		
		S OF COL	Signature (check appropriate box be	low)	
	- 18 B		00 18th Street, N. W., Su	ite 60	7
		No. 7048 Wa	Address (include ZIP Code) shington, D.C. 20036		
	S. C. S.		sirrigeon, D.C. 20036		
		SISTER INC.	02) 659-3055		
	Production of the state of the	EMILE EMILE	Telephone No. (include Area Code	;)	
	Technical Director	☑ Registered Profession	nal Engineer	or	
	Technical Consultant	Other (Specify)			

Ç.	cf	on	V.	G

#### Antenna and Site Information

Name of Applicant	Call	l Sign	Statio	n Location			
Shorter College	N∈	∋W	Rom	e, Georg	gia		
Purpose of Application (Put "X" in appropriate box	x)	Facil	ities Reque	sted			
New antenna construction Amendment of Alteration of existing antenna structure cata Change in location engineering structure and November 20,	ion with tatement	ı CH	217C2	, 4.4 kW	7, 40 m	neters	
Location of Antenna:     State		ounty	City	or Town			
Georgia	F1	.oyd	R	ome			
Exact antenna location (street address). If our	tside city limit	s, give name	of nearest to	wn and distan	ce and direc	ction of antenn	a from town.
Atop water tower at Short	ter Coll	.ege.					
Geographical coordinates (to nearest second give tower location.	d). For directi	onal antenna	a give coord	linates of cent	er of array.	For single ver	tical radiator
North Latitude 34 15	25	w	est Longitu	de	85 °	11 45	
<ol> <li>Is the proposed site the same transmitter-ar specified in another application pending beth of the same transmitter of the specified in another application pending beth of the same transmitter of the specified in another application pending bethe specified in another application pending bethe same transmitter-are specified in another application pending bethe specified in a specified in a</li></ol>	fore the Comr struction? s filed.	nission?	height	d by the Com		□ YE	
<ol> <li>List all landing areas within 5 miles of antenna antenna site.</li> </ol>				the nearest bo	oundary of e	each landing a	rea from the
Landing Area  (a) None (b) (c)		Distance		- - -	Di	rection	
<ol> <li>Attach as Exhibit No. Eng. a description tional antenna, give spacing and orientation</li> </ol>		a system, inc	luding whet	ther tower(s) a	re self-supp	oorting or guye	ed. If a direc-
Tower		#1	#2	#3	#4	#5	#6
Overall height above ground (include	meters	31.1					
obstruction lighting)	feet	102					

102

872

265.8

meters

feet

Overall height above mean sea level (include obstruction lighting)

#### Antenna and Site Information

	nd the antenna elements.
I certify that I represent the applicant in the capa information and that it is true to the best of my k	acity indicated below and that I have examined the foregoing statement of techn knowledge and belief.
December 10, 1985	Louis R. du Treil, P. E.
05	Souis R du Treil
OCT OF COLL	Signature (Check appropriate box below)
Souls R. du Paris	1200 18th Street, N.W., Suite 607
	Address (include ZIP Code)
No. 7048	Washington, D.C. 20036
OFFSSIONAL ENGINEE	(202) 659-3055
	Telephone No. (Include Area Code)

☐ Chief Operator

☐ Technical Consultant

7000 FEFT 1 KILOMETER

ROME NORTH, GA.

N3415-W85075/75

1967

AMS 3952 | SW-SERIES V845

SCALE 1.24000

CONTOUR INTERVAL 10 FEET DATUM IS MEAN SEA LEVEL

## PROPOSED SITE AND VICINITY

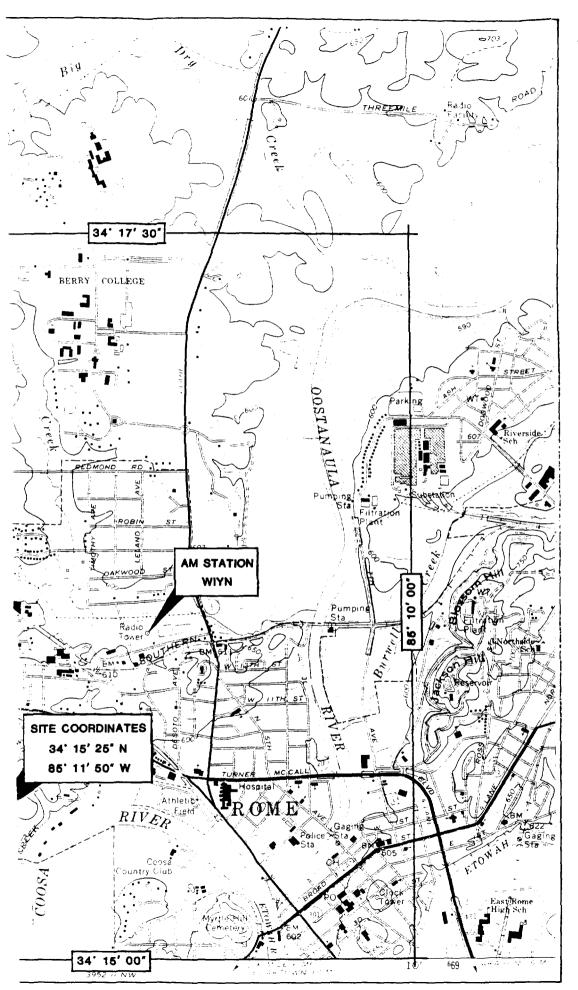
SHORTER COLLEGE ROME, GEORGIA CH 217C2 4.4 KW 40 M

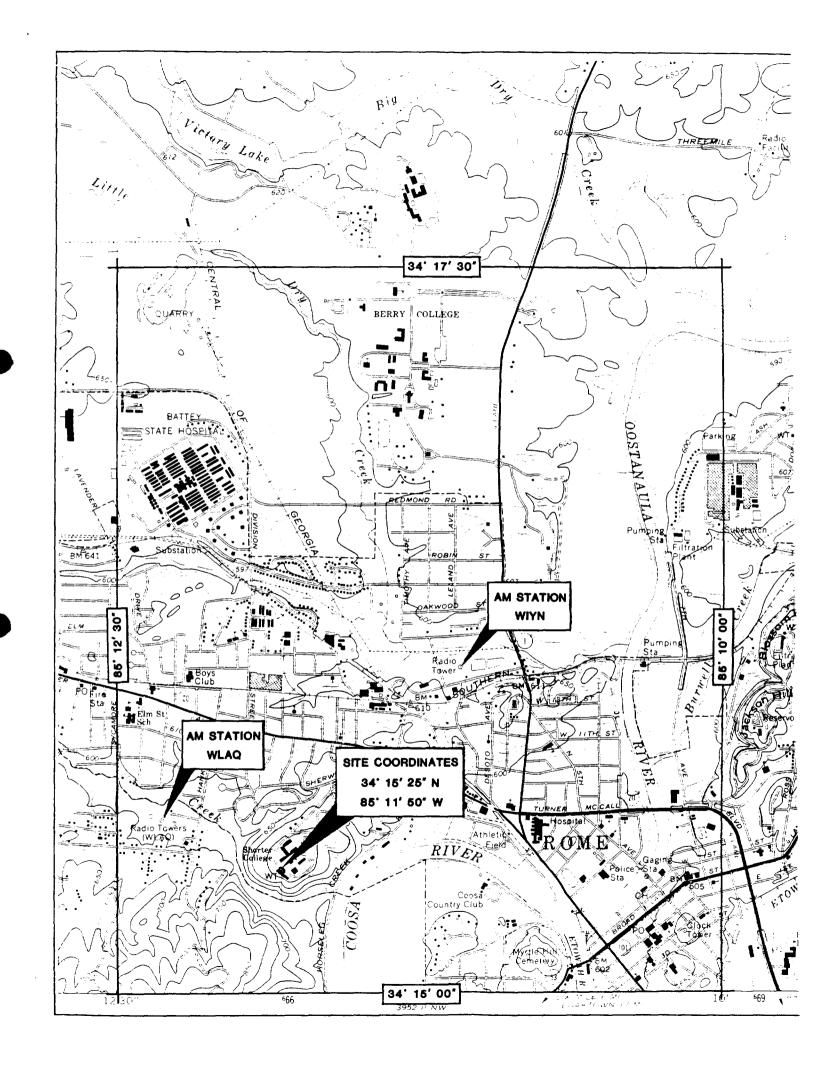
#### NOVEMBER 1985



PRC

 $du^\intercal$ 





#### du Treil - Rackley

Consulting Engineers • Washington, D.C.

ENGINEERING EXHIBIT

AMENDMENT TO

APPLICATION FOR FM CONSTRUCTION PERMIT

SHORTER COLLEGE

ROME, GEORGIA

CH 217C2 4.4 KW 40 M

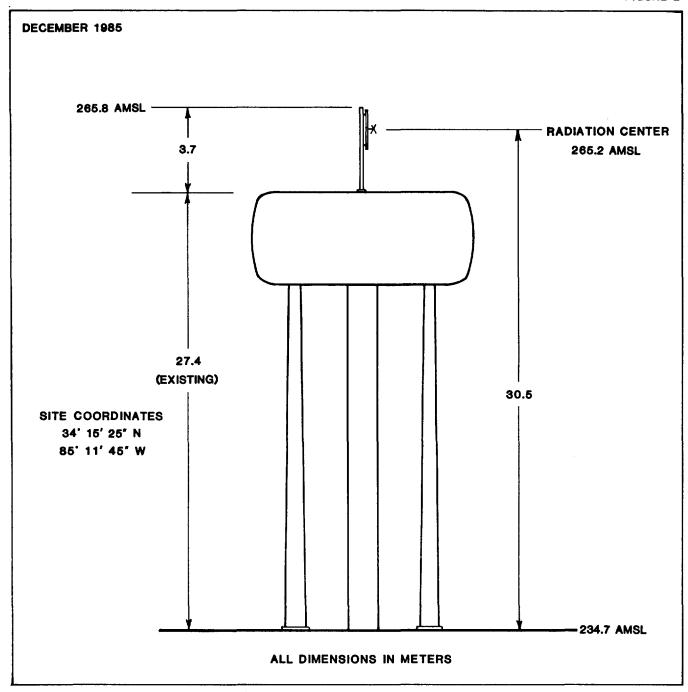
#### Engineering Statement

The engineering exhibit of which this statement is part was prepared on behalf of Shorter College, Rome, Georgia, in support of an amendment to its application for a new non-commercial educational FM broadcast station. This amendment reflects a change of the transmitter location only and does not change the proposed antenna height or effective radiated power.

The water tower on which the proposed antenna will be mounted is actually 400 feet east of the location shown in the original application. Site elevation above mean sea level remains unchanged at 234.7 meters; therefore, only the geographic coordinates, site map and antenna sketch require modification. The site map and antenna sketch are attached as Figure 1 and Figure 2, respectively.

December 10, 1985

Louis R. du Treil, P.



## PROPOSED ANTENNA AND SUPPORTING STRUCTURE

SHORTER COLLEGE ROME, GEORGIA

CH 217C2 4.4 KW 40 M

#### EXHIBIT 1

HOW THE PROPOSED EDUCATIONAL FM STATION AT SHORTER COLLEGE
WILL BE USED FOR THE ADVANCEMENT OF AN EDUCATIONAL PROGRAM

The proposed educational FM broadcast station at Shorter College will be used for the advancement of an educational program in two distinct ways.

The proposed station will first serve the Rome/Floyd County community by offering enriching music and programming not available locally. The proposed station will offer classical and other enduring music as an important part of its programming schedule. Shorter College is renowned for its Music Department, and already has an extensive and high quality audio tape library of performances which have taken place at the college. The proposed station would utilize these recordings along with commentary provided by music faculty to provide an important educational service to the local community.

Secondly, the proposed station will be staffed in part by students of the college's Communication Arts Department. This department is dedicated to an educational program in the areas of Mass Communications and Broadcasting, Speech Communication and Public Relations, and Drama. Via lab assignments, students would be involved in the station at all levels of operation.

Two radio labs are currently available to our students, a basic or beginning lab and an advanced lab. All students in the Communication Arts Department are required to take as many as three semesters of lab. These labs are currently taught in our two studio audio facility. These studios would become the nucleus of the proposed radio station. Appended as an attachment to this exhibit are the course requirement sheets for the four courses of study of the college which would require lab work.

Depending upon the students' major area of study and interest, we would propose to allow the student supervised experience in board operation and announcing, programming and planning, concept and program production, station public relations and community support, and insight and experience in the management of the station. Advanced students who intend to make their careers in broadcasting would be allowed to enter internships, or semester long full time experiences with the proposed station.

The station would provide an invaluable educational opportunity in all phases of radio broadcasting, for a wide range of students. The proposed station would provide a vital stepping stone between the classroom and professional broadcasting for

Exhibit 1 Shorter College Page 2

students intending to make their career in radio. For other students, those in Public Relations, Speech Communication, Drama and Theater, Marketing, and Education, to name a few, the opportunity of lab experience in the proposed radio station will add a breadth to their education which would not otherwise be available.

#### EXHIBIT 2

#### PURPOSE AND OBJECTIVE IN ESTABLISHING

#### THE PROPOSED STATION AND

#### STATEMENT OF PROPOSED PROGRAM POLICIES

The purpose and objective of establishing the proposed station is to further the educational programs of Shorter College, and provide radio programming not currently available to the Rome/Floyd County community.

Our first purpose is that the proposed station provide a rewarding educational experience to many of the students at Shorter College. The related objective is that students, particularly those in the Communication Arts Department, will be provided with experience at all levels of radio station operation; experience which will allow them to perform competently and creatively in professional broadcasting and related fields.

Our second purpose is to provide classical and other enduring music programming for the Rome and Floyd County community. Our objective with the proposed station is to provide community access to important programming not now available, and as a result, enrichen the community.

#### PROPOSED STATION POLICY

Following is the basic set of policies which would be put into effect at the proposed station.

#### Station Policies Regarding Programming

As Shorter College strives to remain an educational institution of the highest quality, the following policies will be used as guidelines in the selection of programming content on the college radio station:

- 1. All program content must be consistent with the standards of the college and the community standards of the Rome and Floyd County community.
- 2. Program material and program content of the proposed station shall, on the whole, be educational and/or informative for listeners in the Rome and Floyd County community.

- 3. Music programming of the proposed station shall be varied, but centered upon the classical tradition of music instruction of the college.
- 4. Specifically prohibited is program and music content which:

Glorifies, encourages, or condones the use of illegal drugs, or other harmful substances.

Encourages immoral or illegal behavior.

Contains obscene or pornographic references.

Makes misleading or untruthful representations.

#### Station Policies Regarding Employment

In accordance with published college policy, the proposed radio station would not descriminate on the basis of race, color, national and ethnic origin, physical handicap, or sex, with regard to employment practices, or the administration of proposed station policy.

Secti	on VI	Equal Employment Opportunity Program		
1.	Does the applicant propose to em	ploy five or more fulltime employees?	☐ YES	₩ NO
	If the answer is Yes, the applicant n	nust include an EEO program called for in the separate 5 Point Model EEO P	rogram [FCC Form	1396 (A)].
Secti	on VII	Certification		
1.	Has or will the applicant comply v Commission's Rules?	vith the public notice requirement of Section 73.3580 of the	₩ YES	□ <sub>NO</sub>
		ny claim to the use of any particular frequency as against the regulatory, whether by license or otherwise, and requests an authorization in accors as Act of 1934, as amended.)		
tions	<del>-</del>	at all the statements made in this application and attached exhibits are cons I part hereof and are incorporated herein.	sidered material re	presenta-
othe	The APPLICANT represents that trapplication with which it may be in	his application is not filed for the purpose of impeding, obstructing, or del n conflict.	aying determinatio	on on any
thro		of the Commission's Rules, the APPLICANT has a continuing obligation I and significant changes in information furnished.	to advise the Con	nmission,
	WILLFUL FALSE STATE	MENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPR U.S. CODE, TITLE 18, Section 1001.	ISONMENT.	
good	I certify that the statements in this	application are true, complete, and correct to the best of my knowledge	and belief, and ar	e made in
•	ed and dated this24th	day of January, 19 86.	lente	·
	Name of Applic	President of the C	ollege	
	FCC	NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT		

## AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, accountants, engineers, and application examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested Permit.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.